UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,201	10/10/2003	Esmond Ho	15520-US-CONT	1251
23553 MARKS & CLI	7590 04/08/200 E RK	EXAMINER		
P.O. BOX 957		JAIN, RAJ K		
STATION B OTTAWA, ON K1P 5S7			ART UNIT	PAPER NUMBER
CANADA			2616	
			MAIL DATE	DELIVERY MODE
			04/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		T & 11 (1 N)	I & 11 (/)			
		Application No.	Applicant(s)			
Office Action Comments		10/682,201	HO ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Raj K. Jain	2616			
Period fo	The MAILING DATE of this communication apports. Or Reply	pears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status						
1)🖂	Responsive to communication(s) filed on 31.	<u>January 2008</u> .				
2a)⊠	This action is FINAL . 2b) ☐ Th	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
•—	Claim(s) <u>1-4</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
·	5) Claim(s) is/are allowed.					
·	☐ Claim(s) <u>1-4</u> is/are rejected.					
·	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement. Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
<i>,</i> —	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☒ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kalampoukas et al (USP 5,675,576).

Regarding claim 1, Kalampoukas discloses a method of providing feedback (via RM cells; col 5 line 9-14) about a contention point (Fig. 1, say switch 3) to a source (S1, S2 or S3) of a multicast connection from said source (say S3) to a plurality of different destinations (D2, D3 and D1), wherein at said contention point (say switch 3) the multicast connection splits into a plurality of streams directed toward said different destinations (D2, D3; Fig. 1, switch 3 serves as multicast contention point to destinations D2, D3 and D1, a minimum ER value amongst the multicast streams going to destinations D2, D3 and D1 is determined based on the slowest stream and that minimum ER value is forwarded in the backward direction to the source S3; col 7 lines 10-15), the method comprising:

identifying a slowest stream of said plurality of streams of the multicast connection at the contention point (col 6 line 58 – col 7 line 15, a minimum ER value identified amongst the multicast flows D2, D3 and D1 which is representative of the slowest stream at the multicast contention point switch 3);

executing an explicit rate (ER) calculation only with respect to accounting characteristics of the slowest stream at the contention point (Fig. 1; col 7 lines 10-15, a ER value is calculated with respect to the slowest stream D2, D3 or D1 at the contention point switch 3);

Page 3

transmitting a result of the slowest stream ER calculation back to the source (col 7 lines 10-15, The calculated ER value of the slowest stream D2, D3 and D1 is sent back to the source S3 via RM cell); and

controlling a data transmission rate of said source (S3) of said multicast connection using said slowest stream ER calculation (col 7 lines 30-63, data transmission rate is controlled based on the RM cell received at the source carrying the ER value of the slowest stream D2, D3 or D1 via the Switch 3).

Regarding claim(s) 2 & 4, Kalampoukas discloses the multicast connection is set up as an asynchronous transfer mode (ATM) (col 1 lines 30-40) available bit rate (ABR) connection, and said step of transmitting includes writing ER calculation results in resource management (RM) cells flowing towards the source (col 1 line 36-40 emphasizes that the invention is focused on ABR service and is the preferred embodiment and thus ER calculation results using RM cells in an ABR service is explicitly disclosed; see also col 14 lines 37-52).

Regarding claim 3, Kalampoukas discloses a contention point includes a memory buffer (Figs. 3 & 4 show a buffered switch, col 6 lines 34-45) for storing cells received from the source in a temporally ordered linked list (col 5 lines 25-31); multicasting is effected by copying cells from the linked list to ports associated with the

Art Unit: 2616

various multicast connection streams (col 4 line 58- col 5 line 2), and a read pointer is maintained for each stream to provide an index into the linked list; and said step of identifying the slowest stream includes identifying the read pointer associated with a temporally earliest cell in the linked list (Fig. 2, col 5 lines 50-63, col 7 lines 30-44, each RM cell has a VC identifier for each connection and thus an read pointer associated with a given cell).

Response to Arguments

Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2616

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJ K. JAIN whose telephone number is (571)272-3145. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raj K. Jain/

Primary Examiner, Art Unit 2616 April 8, 2008